

We claim:

1. A cord lock comprising:

a housing;

a first cam attached to the housing at a position to be able to rotate about a first axis from at least one unlocked position to a locked position, and from the locked position to the at least one unlocked position;

a surface spaced apart from the first cam such that a cord passing over the surface will be pressed against the surface and restrained when the first cam is in the locked position, and the cord can freely pass over the surface in at least one direction when the cam is in the at least one unlocked position;

a cam lock within the housing and capable of assuming a first position in which the first cam is in the locked position, and at least one additional position in which the first cam is engaged by the cam lock and in the at least one unlocked position;

a spring attached to one of the cam lock and the first cam biasing the first cam to the locked position and enabling the first cam to move from the locked position and the cam lock to move from the first position to the at least one unlocked position when a selected force acts on one of the cam lock and a cord positioned within the cord lock; and

a release cord attached to the cam lock in a manner so that pulling the release cord moves the cam lock to engage and move the first cam from the locked position positioned within the cord lock to pass over the surface in a direction opposite the one direction.

2. The cord lock of claim 1 also comprising a plurality of teeth attached to the first cam and positioned to engage a cord passing through the cord lock when the first cam is in the locked position.

3. The cord lock of claim 1 also comprising a roller attached to the housing wherein the surface spaced apart from the first cam is on the roller.

4. The cord lock of claim 1 also comprising a second cam attached to the housing and spaced apart from the first cam wherein the surface spaced apart from the first cam is on the second cam.

5. The cord lock of claim 1 wherein the cam lock is comprised of a pair of interlocking drums.

6. The cord lock of claim 1 wherein the cam lock is comprised of a box shaped carriage.

7. The cord lock of claim 1 also comprising:

at least one additional cam attached to the housing at a position to be able to rotate about the first axis from at least one unlocked position to a locked position, and from the locked position to the at least one unlocked position; and

an additional surface spaced apart from the at least one additional cam such that a cord passing over the additional surface will be pressed against the additional surface and restrained when the at least one additional cam is in the locked position, and the cord can freely pass over

the additional surface when the at least one additional cam is in the at least one unlocked position.

8. The cord lock of claim 1 wherein there are four cams, two cams positioned on each of opposite sides of the cam lock.

9. The cord lock of claim 1 also comprising:

a second housing spaced apart from the first housing;

a second housing cam within the second housing at a position to be able to rotate about a first axis from at least one unlocked position to a locked position, and from the locked position to either the first unlocked position or at least one unlocked position;

a second housing surface spaced apart from the second housing cam such that a cord passing over the surface will be pressed against the surface and restrained when the second housing cam is in the locked position, the cord can freely pass over the surface when the second housing cam is in the at least one unlocked position,

a second housing cam lock attached to the housing and capable of assuming a first position in which the second housing cam is in the locked position, and at least one additional position in which the second housing cam is engaged by the cam lock and in the at least one unlocked position;

a spring attached to the second housing cam lock, biasing the second housing cam lock to the locked position and enabling the second housing cam to move from the locked position to the first unlocked position when a selected force acts in the one direction on a cord positioned within the cord lock, and

the release cord attached to the second housing cam lock in a manner so that pulling the release cord moves the second housing cam lock from the locked position to the second unlocked position thereby allowing a cord positioned within the cord lock to pass over the second housing surface in the opposite direction.

10. A cord lock comprising:

a housing,

a first cam attached to the housing at a position to be able to rotate about a first axis from a first unlocked position to a locked position, from a second unlocked position to the locked position, and from the locked position to either the first unlocked position or the second unlocked position;

a surface spaced apart from the first cam such that a cord passing over the surface will be pressed against the surface and restrained when the first cam is in the locked position, the cord can freely pass over the surface in one direction when the cam is in the first unlocked position and the cord can freely pass over the surface in an opposite direction when the cam is in the second unlocked position,

a cam lock attached to the housing and capable of assuming any of at least three positions, a first position in which the first cam is in the locked position, a second position in which the first cam is in the first unlocked position, and a third position in which the first cam is in the second unlocked position;

a spring attached to the cam lock, biasing the cam lock to the locked position and enabling the cam lock to move from the locked position to the first unlocked position when a selected force acts in the one direction on a cord positioned within the cord lock, and

a release cord attached to the cam lock in a manner so that pulling the release cord moves the cam lock from the locked position to the second unlocked position thereby allowing a cord positioned within the cord lock to pass over the surface in the opposite direction.